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APPLICATION NO. 88/548,146	FILING DATE 10/25/95	FIRST NAMED INVENTOR WATANABE	A	ATTORNEY DOCKET NO. H
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SHAH, S EXAMINER

ART UNIT

PAPER NUMBER

06/23/97

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/548,146

Applicant(s)
Watanabe et al.

Examiner
SANJIV SHAH

Group Art Unit
2309



- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-5 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 5 is/are allowed.
- ☒ Claim(s) 1-4 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Oath/Declaration

1. Applicant has not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a). A statement over applicant's signature providing a complete post office address is required.

Claim Rejections - 35 USC § 103

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (Patent # 5,063,281) in view of Casler Jr. (Patent # 4,568,816) and Ramsey et al. (Patent # 4,258,425).

Mizuno et al discusses an arc welding method and a method of determining orientation.

Casler Jr., discusses a method of arc welding with auxiliary points along the path.

Ramsey et al. discusses a self-programmed arc welding manipulator.

Regarding claims 1 and 2, Mizuno et al. teaches the method of teaching welding torch orientation as shown in fig 1. Transferring position data previously obtained on start point and end point is described in the abstract and in col 6, lines 11-21. Inputting an angle is described in col 2, line 64 - col 3, lines 25. Obtaining a reference plane is described in col 6, lines 24-31. Determining a torch orientation is described in col 6, lines 22-23. Mizuno et al. teaches that the system is

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controlled by a computer as shown in fig 2., However, Mizuno et al. fails to suggest a method of setting an auxiliary points in the periphery of the junction point and software calculation processing. Casler, Jr. and Ramsey et al. does. Specifically, Casler, Jr. teaches a method of setting auxiliary points as shown in fig 4 and 5, elements 86, 88 etc. Ramsey et al. teaches a software calculation processing according to the arrangement of points as described in col 5, lines 35-40. Therefore, it would have been obvious for one with ordinary skill in the art at the time of invention to include an auxiliary points and to implement a software processing because it provides precise control of the manipulator on the weld line, thus reducing error.

Regarding claim 3, Ramsey et al. teaches the claimed invention of software processing as described in col 5, lines 31-45.

Regarding claim 4, Casler, Jr. teaches the claimed invention of teaching reference plane as shown in fig 8, element 115.

3. Claim 5 is allowed over the prior art of the record.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanjiv Shah whose telephone number is (703) 305-8355.

The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor David K. Moore can be reached at (703) 308-7452. The fax number for this group is (703) 305-3988.

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

Sanjiv Shah

June 12, 1997



**TARIQ R. HAFIZ
PRIMARY EXAMINER
GROUP 2300**